AMENDMENT OF CLAIMS

(Currently amended)

1. A wave energy conversion device for converting wave energy from wave motion in a body of water (the sea) to a pressurized fluid output comprises:

(a) a stable platform secured in a seabed position in the sea at a depth below the sea surface;

(b) a lever arm having a proximal end pivotably mounted to the platform and a distal end extending upwardly from the proximal end in a vertical direction toward the sea surface such that the distal end is movable near the sea surface in a pivoting motion about the proximal end mounted to the platform below the sea surface;

(c) a wave-energy absorbing panel coupled to the distal end of the lever arm and oriented to absorb the impulse wave energy of waves moving through the sea near the sea surface, said panel having a predefined panel surface area facing toward a given direction of expected wave motion beneath the sea surface which is impacted by the wave motion beneath the sea surface to move ~~moving~~ in oscillating motion to and fro as the lever arm is pivoted with its distal end moving pivotably about its proximal end with the ebb and flow of wave motion; and

(d) a fluid pump having a piston rod coupled to the pivoting lever arm for applying pressure to intake fluid in the pump with the oscillating motion of the panel in order to provide a high-pressure fluid output for high-pressure uses,

wherein the panel has ~~a major part of~~ substantially its entire panel surface area ~~positioned within~~ submerged in a sea subsurface region defined as approximately a depth of L/2 below the sea surface, where L represents the wavelength of the waves moving near the sea surface.

(Original)

2. A wave energy conversion device according to Claim 1, combined with a desalination unit employing the high-pressure fluid output from the pump to produce a desalinated water output.

(Original)

3. A wave energy conversion device according to Claim 2, wherein the desalination unit is of a type operating by reverse osmosis.

(Original)

4. A wave energy conversion device according to Claim 2, wherein the desalination unit is supported with the pump on the platform and is coupled to the high-pressure fluid output from the pump.

(Original)

5. A wave energy conversion device according to Claim 4, wherein the desalination unit is positioned in alignment with the pump in a downstream direction of wave motion and presents no greater surface area profile to wave motion than the pump.

(Original)

6. A wave energy conversion device according to Claim 1, wherein the panel is mounted to the lever arm and a connecting rod telescoped to the pump extends at a high angle substantially vertically to a distal connecting point to the lever arm.

(Original)

7. A wave energy conversion device according to Claim 1, wherein the proximal end of the lever arm is connected to a pivotable base plate which has opposing ends coupled to connecting rods of an opposing pair of pumps.

(Original)

8. A wave energy conversion device according to Claim 1, wherein the lever arm is connected to a reciprocating cradle coupled through a pair of connecting rods for dual reciprocating action of the pump.

(Original)

9. A wave energy conversion device according to Claim 1, wherein multiple lever arms supporting the panel are connected together in a reciprocating truss-type structure and coupled to multiple stages of pumps.

(Original)

10. A wave energy conversion device according to Claim 1, wherein the pump is a variable capacity pump having a piston head and radially positioned pipes (or ports) along the sides of its pump bore which are controlled by respective valves so that the volume of the pump can be regulated by opening or closing of the valves.

(Original)

11. A wave energy conversion device according to Claim 1, wherein the pump has one-way outlet valve(s) for releasing pressures inside the pump to vary the pump capacity.

(Original)

12. A wave energy conversion device according to Claim 1, wherein the pump has a one-way valve for controlling the intake of intake seawater through an intake line and another one-way valve for controlling the outflow of pressurized fluid through an outlet line.

(Original)

13. A wave energy conversion device according to Claim 1, wherein the platform is elevated above the seabed on pier structures.

(Original)

14. A wave energy conversion device according to Claim 1, wherein the platform is adjustable in height above the seabed.

(Original)

15. A wave energy conversion device according to Claim 1, wherein the high-pressure fluid output is conducted to shore for use in a commercial scale desalination plant located on the shore.

(Original)

16. A wave energy conversion device according to Claim 1, wherein the device is attached to a submersible structure that can be raised or lowered to and from the seabed depths

and also relocated.

(Original)

17. A wave energy conversion device according to Claim 1, wherein the coupling of the panel to the lever arm is adjustable to adjust the position of the panel in the subsurface region (area) despite sealevel variations.

(Original)

18. A wave energy conversion device according to Claim 1, wherein the pump has an intake for intake seawater that is buoyant or floats on the surface of the sea.

(Original)

19. A wave energy conversion device according to Claim 1, wherein the panel is coupled to a first pump and supported on a sliding sled, and a second pump is coupled between the sliding sled and a fixed part of the platform.

(Original)

20. A wave energy conversion device according to Claim 1, wherein the high pressure uses include a use selected from the group consisting of: desalinating water; producing electricity; cogeneration systems; pumping cold water from the sea depths for air-chiller systems; recirculating water to cooler depths for heat exchange uses; pumping compressed air or other fluids.